15

20

25

30

## What is claimed is:

2015

1. A method of responding to a request in a distributed system, said distributed system including a plurality of hosts, wherein each host is operable to respond to at least one type of request, the method comprising steps of:

receiving a multicasted message, said message including a request; determining a type of said request; and responding to said request based on said type of said request.

- 10 2. The method of claim 1, further comprising a step of designating a subset of said plurality of hosts for each type of request.
  - 3. The method of claim 2, wherein said step of responding further comprises a step of a host of said plurality of hosts responding to said request in response to said host being included in a subset for said type of said request.
  - 4. The method of claim 3, wherein said step of responding further comprises a step of determining whether responding to said request includes providing a state-changing response.
  - 5. The method of claim 4, wherein said step of responding further comprises steps of: generating multiple responses from multiple hosts in said subset for said type of said request;

transmitting said multiple responses to a client in response to said responding including a non-state-changing-response; and

- synchronizing said multiple responses in response to said responding including a statechanging-response.
- 6. The method of claim 5, wherein said step of synchronizing further comprises a step of designating a synchronizing host operable to facilitate transmitting one of said multiple responses to said client.

HP Docket No.: 10008120-1

8

15

20

25

5

10

9.

- The method of claim 6, wherein said step of synchronizing further comprises steps of: 7. transmitting a message to each host in said subset for said type of said request, said message indicating that a response has been transmitted to said client; and deleting said request from a queue for each host receiving said message.
- The method of claim 7, wherein said type of request includes one of a meta data request 8. and a data request.
- A distributed system comprising: a plurality of hosts, each host being included in a subset of hosts operable to respond to a type of request; wherein each host is operable to receive a multicasted message including a request, determine a type of said request, and respond to said request based on said type of said request.
- The distributed system of claim 9, wherein multiple hosts in a subset for said type of said 10. request responds to said request.
  - The distributed system of claim 10, wherein said multiple hosts in said subset for said 11. type of said request determines whether responding to said request includes providing a statechanging response.
  - 12. The distributed system of claim 11, wherein said subset for said type of said request includes a synchronization host, said synchronization host is operable to facilitate transmitting a single response to a client in response to said multiple hosts in said subset generating a statechanging response.
  - The distributed system of claim 12, wherein said multiple hosts in said subset transmit a 13. response to said client in response to said multiple hosts in said subset generating a non-statechanging response.

30

15

20

25

30

5

10

- 14. The method of claim 13, wherein said type of request includes one of a meta data request and a data request.
- 15. A computer readable medium on which is embedded a program, the program performing a method of responding to a request in a distributed system, said distributed system including a plurality of hosts, wherein each host is operable to respond to at least one type of request, the method comprising steps of:

receiving a multicasted message, said message including a request; determining a type of said request; and responding to said request based on said type of said request.

- 16. The computer readable medium of claim 15, wherein said method further comprises a step of designating a subset of said plurality of hosts for each type of request.
- 17. The computer readable medium of claim 16, wherein said step of responding further comprises a step of a host of said plurality of hosts responding to said request in response to said host being included in a subset for said type of said request.
- 18. The computer readable medium of claim 17, wherein said step of responding further comprises a step of determining whether responding to said request includes providing a state-changing response.
- 19. The computer readable medium of claim 18, wherein said step of responding further comprises steps of:
- generating multiple responses from multiple hosts in said subset for said type of said request;

transmitting said multiple responses to a client in response to said responding including a non-state-changing-response; and

synchronizing said multiple responses in response to said responding including a statechanging-response.

HP Docket No.: 10008120-1

20. The computer readable medium of claim 19, wherein said type of request includes one of a meta data request and a data request.

HP Docket No.: 10008120-1

odd )